United States Department of the Interior



FISH AND WILDLIFE SERVICE New Jersey Field Office

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SEP 18 2019

Peter Weppler, Chief Environmental Analysis Branch U.S. Army Corps of Engineers, Planning Division 26 Federal Plaza, Room 2151 New York, New York 10278-0090 Attn: Catherine Alcoba

Dear Mr. Weppler:

This Streamlined Biological Opinion (SBO) concludes project-level consultation pursuant to Section 7 of the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) (ESA) for the U.S. Army Corps of Engineers (Corps) proposed beach renourishment in Sea Bright Borough, Monmouth Beach Borough, Seven Presidents County Park, and Long Branch City, Monmouth County, New Jersey. Effects to listed species from the Corps' 50-year program of beach nourishment and renourishment along a 21-mile section of Monmouth County's Atlantic coast shoreline were evaluated in the Service's 2002 Programmatic Biological Opinion on the Effects of Completion of Sections I and II of the Atlantic Coast of New Jersey Beach Erosion Control Project Sea Bright to Manasquan, Monmouth County, New Jersey on the Piping Plover (Charadrius melodus) and Seabeach Amaranth (Amaranthus pumilus) (PBO). This SBO covers only the proposed 2019-2020 renourishment event, including potential direct and indirect effects to federally listed species that may occur during and after construction. Subsequent events will be considered separate Federal actions and will require individual streamlined consultation under the PBO.

Based on review of the mapping provided by the Corps and best available species occurrence data, the Service concluded (via August 1, 2019 email) that the 2019-2020 project areas are suitable but unoccupied habitat for the federally listed (threatened) red knot (*Caladrius canutus rufa*). Therefore, the Service concurred with the Corps' determination that the subject renourishment is not likely to adversely affect the red knot.

CONSULTATION HISTORY

June 12, 2019

Via email, the Corps requested Geographic Information System layers in support of a forthcoming request for streamlined consultation.

July 11, 2019	Via email, the Service documented staff coordination over the previous month and recommended seasonally restricting all renourishment activities.		
July 16, 2019	Via email, the Corps requested streamlined consultation.		
August 1, 2019	Via email, the Service requested additional information.		
August 12, 2019	Via email, the Corps provided the requested information.		
August 21, 2019	Via email, the Corps provided a draft piping plover monitoring plan and a draft plan to implement the seabeach amaranth conservation measures.		
June 12 to September 4, 2019	Corps and Service staff coordinated via telephone and email.		

PROJECT DESCRIPTION

The 2019-2020 renourishment includes three base task beachfill areas involving placement of 1,330,500 cubic yards of sand. The project also includes 22 possible Option Tasks. The maximum total quantity of material to be place per the options would be 1.35 million cubic yards. A subset or all of these options will be awarded based on schedule and availability of funds. Considering both base and all option areas, the project involves activity in three sections of beach; the maximum extent of each area (including all options) is described below.

- A northern section extends roughly from the Sea Bright Borough Hall to the Monmouth Beach Bathing Pavilion (2.3 miles).
- A central section extends roughly from Joline Avenue in Seven Presidents Park to just south of Madison Avenue in Long Branch (0.6 mile).
- A southern area extends roughly south of Avery Avenue to south of Sycamore Avenue in Long Branch (1.3 miles).

The contract award is currently scheduled for September 12, 2019. Therefore, the earliest work could start after all of the contractor submittals are received and is anticipated to be October 12, 2019. However, work is more likely to start at the end of October or early November 2019. The base task is scheduled to be completed in 120 days from the Notice to Proceed. The schedule for options award is yet to be determined and it is still unknown if some or all will be awarded. If all options were awarded, it would be approximately 80 additional days of work.

ADHERENACE TO CONSERVATION MEASURES

The Corps has confirmed that all Conservation Measures (CMs) in the PBO will be implemented. Regarding CM 5, the Corps has confirmed the following:

• Work in the northern and central sections is slated to be completed by March 1, 2020. If work cannot be completed and continues past March 1, monitoring will be carried out in

accordance with the final monitoring plan. No work will continue in the northern or central sections past March 15, 2020.

• If work in the southern section is initiated or continues past March 1, 2020, monitoring will be carried out in accordance with the final monitoring plan. The Corps will coordinate with the New Jersey Endangered and Nongame Species Program (ENSP) regarding American oystercatcher (*Haematopus palliates*) in this area.

Additional coordination is needed for certain CMs, as noted below.

- CM 3 Under separate cover, the Service will transmit a Scope of Work for the next 3 years of the Endangered Species Management Program.
- CM 4 Please continue to coordinate with the Service and the ENSP regarding educational signs.
- CM 5 Please submit the final monitoring plan before the start of work.
- Please submit the final seabeach amaranth plan as soon as possible; implementation should begin soon. The Service recommends that the Corps adopt a goal for the sand placement areas to support similar numbers of plants in 2020 as in 2019.

STATUS OF THE SPECIES

Relevant biological and ecological information on listed species occurring in the action area was provided in the PBO. That information remains pertinent and was considered by the Service in formulating this SBO.

ENVIRONMENTAL BASELINE

The northern section supported 3 pairs of piping plovers per year in 2017 and 2018. In 2019, the northern section supported 4 pairs with 2 fledged chicks. The central section supported 1 pair in 2017, none in 2018, and 1 pair in 2019. The southern section has no recent history of piping plover nesting activity. Table 1 shows seabeach amaranth numbers for each section.

Table 1. Seabeach amaranth numbers 2016 to 2019

	2019*	2018	2017	2016
Northern	≥19	4	9	29
Central	≥107	67	2	4
Southern	0-18	0	2	1

^{*}Preliminary estimates

¹ The northern and central sections together supported 4 pairs of piping plovers in 2019. One of the 4 pairs that nested in Monmouth Beach North (northern section) relocated part way through the 2019 season and renested within Seven Presidents Park (central section).

EFECTS OF THE ACTION

The Service has reviewed information provided by the Corps for the 2019-2020 Sea Bright to Long Branch renourishment, and determined that the potential effects of the project are consistent with those described in the PBO. Direct and indirect adverse effects to listed species are minimized but not totally avoided by the Corps' adherence to the CMs listed in the PBO.

There will be no direct mortality, physical injury, or disturbance of piping plovers due to the seasonal restrictions and monitoring (CM 5). Piping plovers are not expected to be exposed to contaminated sediments based on CM 2. It is almost certain that seabeach amaranth seeds are present in the renourishment footprint and that all seeds in the sand placement area will be buried and therefore lost to the beach ecosystem, at least for the next few years. It is not possible to estimate how many seeds will be affected; how many of those might have germinated in 2020 absent the renourishment; or how many may survive burial and could eventually germinate following subsequent erosion or re-working of the placed sand. The Corps seabeach amaranth plan (under CM 6) to fence, avoid, and transplant plants will minimize, but may not entirely avoid, mortality of seabeach amaranth plants. The plan is also expected to at least partially offset adverse effects stemming from burial of the seedbank.

Shorter-term indirect effects to listed species include creation of sub-optimal beach profiles and burial of the piping plover prey base, both of which were evaluated in the PBO. The PBO recognizes that the Corps' beach nourishment program maintains sandy beach habitats in areas where they would otherwise be lost due to an extensive network of hard shoreline stabilization structures. The 2019-2020 renourishment is expected to provide some benefits to listed species by widening the beach in areas of occupied habitat, and potentially also by setting back vegetative succession in the upper beach. However, the linear and generally erosional habitats created and maintained by the project are considered sub-optimal for piping plovers and seabeach amaranth. Design template slopes and local dune building activities also result in sub-optimal habitat conditions that may adversely affect listed species, particularly if piping plovers colonize the project area instead of more optimal habitats such as in Sandy Hook. However, based on recent nesting and productivity patterns—and based on intensive species management—we do not expect the project area to create a population sink for piping plovers.

The effects of prey burial on piping plovers are considered highly dependent on the time of year in which renourishment takes place. Recovery time of the invertebrate community following renourishment that occurs in mid- to late-October is expected to fall in the range of 2.0 to 6.5 months. Renourishment between November and January would coincide with a period of sharp seasonal decline in invertebrate abundance, and the infaunal community would not be expected to recover for at least 6.5 months. Renourishment between mid-October and January, therefore, may result in reduced piping plover productivity, or possibly abandonment of nesting areas from reduced prey resources. Renourishment in February or early March may also result in reduced piping plover productivity and/or abandonment of nesting areas due to depression of prey resources close to the start of the nesting season. Based on the proposed timing of the 2019-2020 renourishment (late October/early November through February/early March), we expect that the piping plover prey base will be reduced during the 2020 nesting season. This adverse effect can be minimized by scheduling and completing work in the nesting areas first, which is is required by the PBO (Terms and Conditions (TCs) #1a). As a reminder, TCs #7 is to "Monitor the response of the wrack line and intertidal infaunal invertebrate communities during and after sand

placement within nesting areas." Please coordinate with the Service on how the Corps can implement this requirement during 2020.

Longer-term indirect effects include preclusion of natural habitat formation (adverse) and increased sand transport to Sandy Hook (generally beneficial), both of which were evaluated in the PBO. Past shoreline stabilization (*i.e.*, extensive system of hard stabilization structures and upland development) within the project area has interfered with the formation and maintenance of natural habitats for piping plover and seabeach amaranth. The project will further perpetuate shoreline stabilization and interfere with natural processes, such as the formation of overwash areas that provide optimal habitat for listed species, extending along approximately 4.2 linear miles of Atlantic coast shoreline. This landscape-scale adverse effect may be partially offset by increased sediment transport to Sandy Hook, where wider beaches may benefit listed species.

Other longer-term adverse effects can stem from beach widening that attracts both listed species and human activities such as recreation and beach management practices (e.g., raking, sand fencing), as well as human-associated predator species. The long-term adverse effects associated with human use and management of project area beaches are minimized, but not entirely avoided, by CM 4 (educational signs) and CM 3 (Endangered Species Management Program). Funding of the Endangered Species Management Program also satisfies TCs #6, which requires development of local Beach Management Plans (BMPs). The BMPs have proven a highly effective mechanism for balancing species conservation with local beach management needs.

BIOLOGICAL OPINION

Actions and effects associated with the above action are consistent with those identified and evaluated in the PBO. After reviewing the size and scope of the project, the environmental baseline, the status of federally listed species in the action area, and the effects of the action, it is the Biological Opinion of the Service that the subject action is not likely to jeopardize the continued existence of the piping plover or seabeach amaranth. No critical habitat has been designated for these species within the action area; therefore, no critical habitat will be affected.

INCIDENTAL TAKE STATEMENT

Section 9 of the ESA and Federal regulations pursuant to Section 4(d) of the ESA prohibit the take of endangered and threatened wildlife species, respectively, without special exemption. *Take* is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct. *Harm* is further defined by the Service as an act which actually kills or injures fish or wildlife; such an act may include significant habitat modification or degradation which actually kills or injures fish or wildlife by significantly impairing essential behavioral patterns, including, breeding, spawning, rearing, migrating, feeding or sheltering (50 CFR 17.3). Take that is incidental to, and not intended as part of a Federal action, is not considered prohibited take under the ESA, as long as such take is in compliance the provisions of a Biological Opinion (*i.e.*, the PBO and this SBO).

We expect the 2019-2020 renourishment will cause non-lethal take (harm) of up to 4 pairs of piping plovers during the 2020 nesting season (*i.e.*, injury caused by burial of the prey base, suboptimal habitat conditions, and impacts associated with high levels of human activity despite

the BMPs, potentially culminating in reduced reproductive success). The type and amount of anticipated incidental take is consistent with effects to listed species as evaluated in the PBO.

To be exempt from the take prohibitions of Section 9 of the ESA, the Corps must implement all pertinent Reasonable and Prudent Measures (RPMs), as stipulated in the PBO, to minimize the impact of anticipated incidental take of listed wildlife. The Service has determined that no additional RPMs or implementing TCs, beyond those specified in the PBO, are needed to minimize the impact of incidental take anticipated for the subject action. Please review the TCs with the Service to ensure they are carried out appropriately.

REINITIATION - CLOSING STATEMENT

This concludes streamlined formal consultation on the effects of the proposed 2019-2020 renourishment. As provided in 50 CFR Section 402.16, re-initiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been maintained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this opinion; or, (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending re-initiation. In order to be exempt from the prohibitions of Section 9 of the ESA, the Corps must comply with all binding provisions of the PBO (CMs, RPMs, and TCs), and must carry out the action consistent with the above Project Description. This streamlined formal consultation covers only the 2019-2020 renourishment. Future renourishment actions will be considered separate Federal actions and will require further streamlined consultation.

CONCLUSION

Please contact Wendy Walsh at (609) 382-5274, or wendy_walsh@fws.gov, if you have any questions regarding this consultation, or require further assistance regarding federally listed threatened or endangered species. Please continue to coordinate with the Service and the ENSP regarding educational signs, and please submit the final piping plover monitoring plan and the final seabeach amaranth plan. Please also coordinate with the Service regarding implementation of the TCs, which are required by the PBO to minimize incidental take of piping plovers.

Eric Schrading

Sincerely

Field Supervisor